1944] Hull,—Crotalaria sagittalis in Indiana 493 of the latter (ISOTYPE in Gray Herb.), secured the already mature fruit of the former and sent seeds to England. The confusion probably started with Nuttall himself.—M. L. FERNALD.

CROTALARIA SAGITTALIS IN INDIANA.—In the 7th edition of Gray's Manual the range of this species is given as chiefly

coastal southward from Massachusetts, and northward in the Mississippi basin to Indiana and South Dakota. Deam, in his "Flora of Indiana," p. 592, records this species from five counties in the extreme southern part of Indiana. These counties are within the Mississippi basin. However, Deam, in his book above mentioned, taking his information from Pepoon's "Flora of the Chicago Region," cites two localities in extreme northwestern Indiana, which are in the St. Lawrence and not the Mississippi basin. One locality was along the Wabash Railway, east of Clarke, now a part of the city of Gary, Lake Co., found by Pepoon about 1900 but, according to him, "since then extinct or overlooked." Pepoon also reports in the work above mentioned the finding by Umbach of a large patch along the Lake Shore

(New York Central) Railway at Dune Park in Porter Co. Deam thinks that this species has been introduced into Indiana in grass seed or as a railroad waif.

However, July 18, 1938, I found a large colony, containing at least dozens of individuals, in low sandy soil in the extreme northern portion of East Gary, Lake Co., several miles removed from the above two mentioned localities in the dune country. Originally composed of fairly high dunes, this land had been excavated for its sand at least over thirty years ago, and has become a pine barren with Pinus Banksiana quite conspicuous as a small tree, and Arctostaphylos Uva-ursi var. coactilis contributing much to the undergrowth. The Crotalaria, however, was found in the moister part of the region, among shrubby willows and Hypericum Kalmianum. The Wabash Railway is not far away, but I have found no plants along it. July 13, 1944, I again visited this region, and found the plants still common. At Liverpool, Lake Co., July 28, 1944, I found two vigorous specimens, and more might have been found if time had permitted. This also was in a region excavated for its sand, and bog

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conditions have developed in certain portions, with Vaccinium macrocarpon, Calopogon pulchellus, Rhus Vernix, and Sphagnum as common inhabitants. Crotalaria, however, was found in somewhat drier ground, among outlying small specimens of Robinia viscosa, a plant which has formed a dense thicket with small outlying specimens yearly appearing.

All these plants I have found belong to the St. Lawrence basin,

which, however, is not far from the Mississippi basin, both being in Lake Co. It seems to me that these specimens have migrated in a natural manner, arriving in the localities after the ground has become favorable. Specimens have been sent to the Gray Herbarium.—EDWIN D. HULL, Gary, Indiana.

THE GEOGRAPHIC SEGREGATION OF MONARDA FISTULOSA AND ITS VAR. MOLLIS.—True Monarda fistulosa L. has the veinlets of the lower surfaces of the younger leaves strigose-hirsute with elongate trichomes; M. mollis L., whether considered a distinct species or as a variety of M. fistulosa, has the lower surfaces only minutely puberulent to glabrescent, at most with very short hairs. In their Review of the Genus Monarda in Univ. Calif. Pub. Bot. xx. no. 2: 147–194 (1942) McClintock & Epling merge the two as one species, not even separating them as varieties; and they have diligently placed upon nearly 200 sheets in the Gray Herbarium of var. mollis (L.) Benth.¹ or M. mollis L. labels stating that these plants are all M. fistulosa. Now it so happens that such close students of our eastern mints as Bentham, Gray, Watson, Wiegand & Eames, Deam and many others, none of them "splitters," have regularly recognized var. mollis as fairly distinct; and certainly in its natural range it is much more

¹ The bibliographic references to this plant, under M. fistulosa, in the recent Review would have gained by careful checking. The references as given there are: "M. mollis L., Amoen, Acad. 3: 390, 1764" and "M. fistulosa var. mollis L., Sp. Pl., ed. 2, 2: 32, 1762." In the Stockholm (original) issue of Amoenitates Academicae the description of M. mollis is in vol. iii. p. 399 (not 390); and, according to Pritzel, this volume was published in 1756 (not 1764). Furthermore, it is clear that Linnaeus did not make the combination M. fistulosa, var. mollis, wrongly ascribed to him. Looking up the reference given by McClintock & Epling, to "L., Sp. Pl. ed. 2, 2: 32" one finds that vol. 2 follows without repaging the numbering of pages of vol. 1. The first page of vol. 2 is 785; the last in vol. i, p. 784. In vol. i (not "2"), on p. 32 Linnaeus, as was his frequent custom, treated the M. mollis of Amoen, Acad. as an unnamed variety of M. fistulosa: " β . Monarda mollis. Amoen. acad. 3. p. 399." He did not give a varietal name. The varietal combination was first and correctly made by Bentham, Labiat. Gen. Sp. 317 (1833).